

WE CLAIM:

1. A use of an effective amount of an enteric glial cell in the manufacture of a medicament for promoting the functional regeneration of injured nerve fibers in the nervous system.
2. A use according to claim 1 wherein the enteric glial cells are Type II enteric glial cells.
3. A use according to claim 1 or 2 wherein the enteric glial cells are autologous.
4. A use according to any one of claims 1 to 3 for use in treating a nerve injury.
5. A use according to claim 4 for use in treating a spinal cord injury.
6. A use according to any one of claims 1 to 3 for use in treating a neurodegenerative disease.
7. A use according to claim 6 wherein the neurodegenerative disease is Alzheimer's disease, Parkinson's disease, multiple sclerosis, Huntington's disease, Bell's palsy, Pick's disease and amyotrophic lateral sclerosis.
8. A use according to any one of claims 1 to 7 wherein the functional regeneration is assessed using a behavioral test.
9. A use according to claim 8 wherein the behavioral test is the reflex activation of the cutaneous trunci muscle.
10. A use of an effective amount of an enteric glial cell in the manufacture of a medicament for inducing the formation of a blood-brain barrier in the nervous system.

11. A use according to claim 10 wherein the enteric glial cells are Type II enteric glial cells.
12. A use according to claim 10 or 11 wherein the enteric glial cells are autologous.
13. A use according to any one of claims 10 to 12 for use in treating a nerve injury.
14. A use according to claim 4 for use in treating a spinal cord injury.
15. A use according to any one of claims 10 to 12 for use in treating a neurodegenerative disease.
16. A use according to claim 15 wherein the neurodegenerative disease is Alzheimer's disease, Parkinson's disease, multiple sclerosis, Huntington's disease, Bell's palsy, Pick's disease and amyotrophic lateral sclerosis.